



## SEQUENCE LISTING

Amoldt E  
RECEIVED  
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<110> Vaisvila, Romualdus  
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Kucera, Rebecca B.  
Claus, Toby B.  
Raleigh, Elisabeth A.

<120> Method For Cloning And Producing The MseI Restriction  
Endonuclease

<130> NEB-181

<140> US 09/689,343

<141> 2000-10-12

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<170> PatentIn version 3.1

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Arg Met Ile Tyr Ile Asp Pro Pro Phe Asn Thr Gly Arg Thr Gln Arg  
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Phe	Phe	Thr	Asp	Arg	Thr	Tyr	Ala	Ala	Arg	Ile	Gly	His	Gly	Glu	Asp	
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165 170 175	



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<211> 561

<212> DNA

<213> Micrococcus sp.

<220>

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<223>

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agc gcg gcg aac ctc gct gat cgg tac gta gcg agt gaa gac gac ccc	96
Ser Ala Ala Asn Leu Ala Asp Arg Tyr Val Ala Ser Glu Asp Asp Pro	
20 25 30	
tgg gtc ggc agc ccg ttc gag tgg atc ctt cgc gtt cca tcc aga acg	144
Trp Val Gly Ser Pro Phe Glu Trp Ile Leu Arg Val Pro Ser Arg Thr	
35 40 45	
aag ggc gcg gtc ggt gag ctg ctc gtg agc gaa tgg gct aat gcc aaa	192
Lys Gly Ala Val Gly Glu Leu Leu Val Ser Glu Trp Ala Asn Ala Lys	
50 55 60	
ggc ctc cgt gtg aag agg tcg ggg tcc agc gat gcg gac cgc gtg atc	240
Gly Leu Arg Val Lys Arg Ser Gly Ser Ser Asp Ala Asp Arg Val Ile	
65 70 75 80	
aac ggg cat cgc atc gag atc aag atg tcg act ttg tgg aag tcc ggc	288
Asn Gly His Arg Ile Glu Ile Lys Met Ser Thr Leu Trp Lys Ser Gly	
85 90 95	
ggc ttc aag ttt cag cag atc cgg gat cag gag tac gac ttt tgc ctc	336
Gly Phe Lys Phe Gln Gln Ile Arg Asp Gln Glu Tyr Asp Phe Cys Leu	
100 105 110	
tgc ctt ggg atc agc ccg ttc gaa gtg cac gcg tgg ctg ctg ccc aaa	384
Cys Leu Gly Ile Ser Pro Phe Glu Val His Ala Trp Leu Leu Pro Lys	
115 120 125	
gac cta ttg ctt gag tac gtg att ggt cac atg ggt cag cac acc ggc	432
Asp Leu Leu Leu Glu Tyr Val Ile Gly His Met Gly Gln His Thr Gly	
130 135 140	
gcg agc ggg agc gac act gcg tgg ctg ggg ttc cca gcg gac gag ccg	480
Ala Ser Gly Ser Asp Thr Ala Trp Leu Gly Phe Pro Ala Asp Glu Pro	
145 150 155 160	
tat gac tgg atg cgc cct ttc gga ggt cgc tta ggt cac gtc gaa gat	528
Tyr Asp Trp Met Arg Pro Phe Gly Gly Arg Leu Gly His Val Glu Asp	
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<210> 8  
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<400> 8

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			20					25					30			
Trp	Val	Gly	Ser	Pro	Phe	Glu	Trp	Ile	Leu	Arg	Val	Pro	Ser	Arg	Thr	
		35					40					45				
Lys	Gly	Ala	Val	Gly	Glu	Leu	Leu	Val	Ser	Glu	Trp	Ala	Asn	Ala	Lys	
	50					55					60					
Gly	Leu	Arg	Val	Lys	Arg	Ser	Gly	Ser	Ser	Asp	Ala	Asp	Arg	Val	Ile	
65					70					75					80	
Asn	Gly	His	Arg	Ile	Glu	Ile	Lys	Met	Ser	Thr	Leu	Trp	Lys	Ser	Gly	
				85					90					95		
Gly	Phe	Lys	Phe	Gln	Gln	Ile	Arg	Asp	Gln	Glu	Tyr	Asp	Phe	Cys	Leu	
			100					105					110			
Cys	Leu	Gly	Ile	Ser	Pro	Phe	Glu	Val	His	Ala	Trp	Leu	Leu	Pro	Lys	
		115					120					125				
Asp	Leu	Leu	Leu	Glu	Tyr	Val	Ile	Gly	His	Met	Gly	Gln	His	Thr	Gly	
	130					135					140					
Ala	Ser	Gly	Ser	Asp	Thr	Ala	Trp	Leu	Gly	Phe	Pro	Ala	Asp	Glu	Pro	
145					150					155					160	
Tyr	Asp	Trp	Met	Arg	Pro	Phe	Gly	Gly	Arg	Leu	Gly	His	Val	Glu	Asp	
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ccggtttttt	ttgcgttgaa	tttgtcattt	tgtgccgtgg	tgtttaaacc	gcacagaata	180
aattgtcgtg	atttcacctt	taaaataaaa	ttaaagaga	aaaaaattct	ctgtggaagg	240

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gctatggttag ataaaattga ccgtaagctg ctggccttac tgcagcagga ttgcaccctc 300
tctttgcagg cactgggctga agccgttaat ctgacaacca ccccttgctg gaagcgcctg 360
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<400> 10

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Met Thr His Glu Pro Thr Asp Asp Pro Asp Phe Ile Val Met Ala Ala
1          5          10          15
Ser Ala Xaa Asn Leu Ala Asp Xaa Tyr
          20          25

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<211> 35

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<211> 32

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32

<210> 16

<211> 36

<212> DNA

<213> Unknown

<220>

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36

<210> 17

<211> 30

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<213> unknown

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24

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<212> DNA

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<211> 34

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<223> reverse primer

<400> 21

gggtggtccc gctagctatt agtagggacc gggg

34

En  
conc ✓